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(FILE 'HOME' ENTERED AT 16:57:25 ON 16 FEB 1999)

FILE 'USPATFULL, WPIDS, INSPEC, ELCOM' ENTERED AT 16:57:43 ON 16 FEB 1999

L1 96338 S (FAIL? OR FAULT) (P) DETECT?  
L2 11551 S (TELECOMMUNICATION) (P) (OPTIC? OR LIGHT)  
L3 164 S L1 AND L2  
L4 5 S L3 (P) (CROSS CONNECT SWITCH?)

=> d l4 1-5 bib abs

L4 ANSWER 1 OF 5 USPATFULL  
AN 1999:19859 USPATFULL  
TI Self-healing optical network  
IN Nathan, Sridhar, Plano, TX, United States  
Fee, John A., Plano, TX, United States  
PA MCIWorldCom, Inc., GA, United States (U.S. corporation)  
PI US 5870212 990209  
AI US 98-6965 980114  
DT Utility  
EXNAM Primary Examiner: Negash, Kinfé-Michael  
CLMN Number of Claims: 32  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 796  
AB A self-healing optical network carrying traffic between first and second optical linear terminals. The self-healing optical network including first, second, and third optical switching units, first, second, and third spare optical channels, and a working optical channel. The first, second, and third optical switching units are coupled in a ring configuration using said first, second, and third spare optical channels. The first and second optical switching units are coupled by the first spare optical channel and by the working optical channel. The first and second optical switching units each direct the traffic between the first and second optical linear terminals along the working optical channel or along the second and third spare optical channels in the event the working optical channel is not available.

L4 ANSWER 2 OF 5 USPATFULL  
AN 1998:92885 USPATFULL  
TI Lightwave communication monitoring system  
IN Mock, Joel Leslie, Norcross, GA, United States  
PA Lucent Technologies Inc., Murray Hill, NJ, United States (U.S. corporation)  
PI US 5790285 980804  
AI US 96-651945 960521 (8)  
DT Utility  
EXNAM Primary Examiner: Negash, Kinfé-Michael  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 690  
AB A lightwave communication monitoring system has a monitoring member to

which are applied signals extracted from one or more fibers in a transmission system. The monitoring member detects the signal and applies a signal derived therefrom to a control or processing unit. When the strength of the derived signal is below a predetermined minimum, the control unit is adapted to activate a fault location member which applies a fault location signal to the fiber circuit in which the signal, or lack thereof, is transmitted. The system is capable of handling a plurality of fiber circuits simultaneously. In another embodiment of the invention, a test signal is launched on the first fiber, or, simultaneously launched on a plurality of first fibers of fiber pairs, and the test signal is simultaneously extracted from one or more of a plurality of corresponding second fibers of the fiber pairs. The system also includes means for measuring the strength of the transmission signals, which are at a different frequency from the test signal.

L4 ANSWER 3 OF 5 USPATFULL

AN 97:79295 USPATFULL

TI Lightwave communication monitoring switch

IN Mock, Joel Leslie, Norcross, GA, United States

PA Lucent Technologies Inc., Murray Hill, NJ, United States (U.S. corporation)

PI US 5664034 970902

AI US 96-653373 960521 (8)

DT Utility

EXNAM Primary Examiner: Healy, Brian

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 618

AB An optical switch device has a plurality of fixed optical fiber terminations supported in a fixed array, and a terminated fiber movable by means of a stepping motor into registry with each of the terminations. Opposite the fixed array is a second array of optical devices oriented such that each termination defines a unique light path with each of the optical devices, with the light paths thus formed being parallel to each other.

L4 ANSWER 4 OF 5 USPATFULL

AN 96:17539 USPATFULL

TI Methods and apparatus for utilizing protection paths as additional working paths in switched ring network systems

IN Ohara, Katsuichi, Kawasaki, Japan

PA Fujitsu Limited, Kawasaki, Japan (non-U.S. corporation)

PI US 5495472 960227

AI US 94-215378 940321 (8)

PRAI JP 93-257582 930920

DT Utility

EXNAM Primary Examiner: Safourek, Benedict V.

LREP Greer, Burns & Crain, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 5 Drawing Page(s)

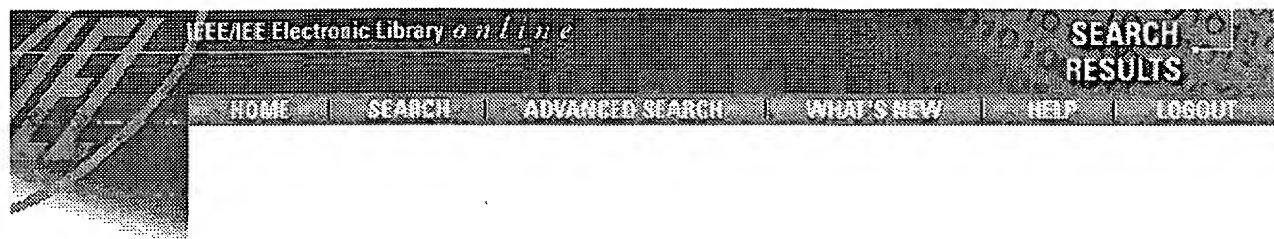
LN.CNT 464

AB A path select switching unit is installed in network elements that are interconnected to make up a ring network. A path select switching unit has a path protection switched ring mode in which a first cross-connect uses a working path and a protection path which are counter-rotating paths set up on a line in the network. A re-use mode is also provided in

which a second cross-connect is adapted for re-use of the protection path as a second working path for a different signal on that line. The path select switching unit in each network element **detects a failure** in the working path and, when a **failure** occurs, switches from the second cross-connect to the first cross-connect so as to force the path protection switched ring mode to be established, allowing data transmission over the protection path on the line.

L4 ANSWER 5 OF 5 INSPEC COPYRIGHT 1999 IEE  
 AN 98:5985251 INSPEC DN B9809-6230H-004  
 TI Reliability performance of **optical cross-connect switches**-requirements and practice.  
 AU Wosinska, L.; Thylen, L. (School of Applied Eng., R. Inst. of Technol., Kista, Sweden)  
 SO OFC '98. Optical Fiber Communication Conference and Exhibit. Technical Digest. Conference Edition. 1998 OSA Technical Digest Series Vol.2 (IEEE Cat. No.98CH36177)  
 Washington, DC, USA: Opt. Soc. America, 1998. p.28-9 of vii+421 pp. 5 refs.  
 Conference: San Jose, CA, USA, 22-27 Feb 1998  
 Sponsor(s): IEEE/Lasers & Electro-Opt. Soc.; IEEE Commun. Soc.; Opt. Soc. America  
 Price: CCCC 1 55752 521 8/98/\$6.00  
 ISBN: 1-55752-521-8  
 DT Conference Article  
 TC Practical; Experimental  
 CY United States  
 LA English  
 DN B9809-6230H-004  
 AB In the switching systems considered we assumed that each OXC has four input and output links and is capable of switching between 16 wavelength channels (i.e., four wavelength channels per link). In our reliability analysis we assume that the components are defect-free from the beginning.

There must be a method of **detecting a failure** in the systems, and a technique for system recovery from faults. Furthermore, we assume that each component has an exponentially distributed lifetime, that component **failure** durations are short relative to the times between **failures**, and that times between **failures** and the duration of the component **failures** are independently distributed. Our calculations are based on **failure** rates and a mean repair time of six h. The reliability performance of suggested OXCs without inherent redundancy are far from that required. To solve this problem we recommend introducing some kind of redundancy for critical components or subsystems to obtain a structure that will be meeting **telecommunication** standards.













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Refine



















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**36** are presented on this page, sorted by in order.

DOC TYPE	VIEW ISSUE TOC	VIEW FULL PAGE	VIEW CITATION
CNF			<p><b><u>Substituting Voas's testability measure for Musa's fault exposure ratio</u></b>  Voas, J.M.; Miller, K.W.  Communications, 1996. ICC '96, Conference Record, Converging Technologies for Tomorrow's Applications. 1996 IEEE International Conference on  Volume: 1 , Page(s): 230 -234 vol.1</p>
CNF			<p><b><u>A scaleable waferscale architecture for real-time 3-D image generation</u></b>  Westmore, R.J.  Wafer Scale Integration, 1989. Proceedings., [1st] International Conference on , Page(s): 95 -100</p>
PER			<p><b><u>Comments on systematic procedure for test generation of PAL based circuits</u></b>  Nale, A.S.  Computers and Digital Techniques, IEE Proceedings E [see also IEE Proceedings-Computers and Digital Techniques]  Volume: 138 2 , Page(s): 106 -108</p>
PER			<p><b><u>IBM's ES/9000 Model 982's fault-tolerant design for consolidation</u></b>  Spainhower, L.; Gregg, T.A.; Chillarege, R.  IEEE Micro  Volume: 14 1 , Page(s): 48 -59</p>
CNF			<p><b><u>Tolerating client and communication failures in distributed groupware systems</u></b>  Hyong Sop Shim; Prakash, A.  Reliable Distributed Systems, 1998. Proceedings. Seventeenth IEEE Symposium on , Page(s): 221 -227</p>

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| CNF |    |    | <p><b><u>An overview of the fault protection design for the attitude control subsystem of the Cassini spacecraft</u></b></p> <p><i>Brown, G.M.; Johnson, S.A.</i><br/>         American Control Conference, 1998. Proceedings of the 1998 Volume: 2 , Page(s): 884 -898 vol.2</p>  |
| CNF |    |    | <p><b><u>Data logging: a method for efficient data updates in constantly active RAIDs</u></b></p> <p><i>Gabber, E.; Korth, H.F.</i><br/>         Data Engineering, 1998. Proceedings., 14th International Conference on , Page(s): 144 -153</p>  |
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| CNF |    |    | <p><b><u>Identifying fault-prone function blocks using the neural networks - an empirical study</u></b></p> <p><i>SungBack Hong; Kapsu Kim</i><br/>         Communications, Computers and Signal Processing, 1997. 10 Years PACRIM 1987-1997 - Networking the Pacific Rim. 1997 IEEE Pacific Rim Conference on Volume: 2 , Page(s): 790 -793 vol.2</p> |
| CNF |  |  | <p><b><u>Intelligent process diagnosis based on end-of-line electrical test data</u></b></p> <p><i>Ruey-Shan Guo; Cheng-Kai Tsai; Jian-Huei Lee; Shi-Chung Chang</i><br/>         Electronics Manufacturing Technology Symposium, 1996., Nineteenth IEEE/CPMT , Page(s): 347 -354</p>  |
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*Monaghan, T.; Kanawati, G.; Abraham, J.; Olson, D.; Iyer, R.*  
Digital Avionics Systems Conference, 1994. 13th DASC.,  
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*Basu, S.K.; Dattagupta, J.; Dattagupta, R.*  
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| CNF |  |  | <p><b><u>A special-purpose computer for automatic target recognition</u></b><br/> <i>Napolitano, L.M., Jr.; Andaleon, D.D.; Berry, K.R.; Bryson, P.R.; Klapp,<br/> S.R.; Leeper, J.E.; Redinbo, G.R.</i><br/> Acoustics, Speech, and Signal Processing, 1989. ICASSP-89.,<br/> 1989 International Conference on , Page(s): 1564 -1567 vol.3</p>  |
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